

TEST CHANGE

Renin Activity

0070105, RENIN

Specimen Requirements:

Patient Preparation: Blood should be obtained in seated position in the morning without venous stasis (release tourniquet after venipuncture and wait at least 5 seconds before withdrawing blood). If the patient is supine, ensure that the patient is in this position for at least 30 minutes prior to collection. ~~Collect midmorning after patient has been sitting, standing, or walking for at least 2 hours and seated for 5-15 minutes. Refer to the Additional Technical Information for specific patient preparation recommendations.~~

Collect: Lavender (EDTA) or pink (K2EDTA). Do not collect in refrigerated tubes nor store tubes on ice.

Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 2 mL plasma to an ARUP standard transport tube and freeze immediately. (Min: 1.2 mL)
Storage at refrigerated temperatures may cause falsely elevated results. Do not collect in refrigerated tubes. Process blood at room temperature and centrifuge tubes in a nonrefrigerated centrifuge.

Transport Temperature: CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.

Unacceptable Conditions: Serum. Specimens collected in citrate, heparin, or oxalate. Hemolyzed specimens.

Remarks:

Stability: After separation from cells: Ambient: Unacceptable; Refrigerated: Unacceptable; Frozen: 1 month

Methodology: Quantitative Enzyme-Linked Immunosorbent Assay (ELISA)

Note: Refer to the Additional Technical Information for Endocrine Society recommendations for patient preparation, specimen collection, medications for hypertension control during confirmatory testing for primary aldosteronism, and factors that may lead to false-positive or false-negative aldosterone-renin ratio (ARR) results.

CPT Codes: 84244

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Plasma renin activity measures enzyme ability to convert angiotensinogen to angiotensin I and is limited by the availability of angiotensinogen. Plasma renin activity is not an accurate indicator of enzyme activity when angiotensinogen is decreased.

Reference Interval:

Test Number	Components	Reference Interval		
	Renin Activity			
		Age	Supine (ng/mL/hr) Normal sodium diet	Upright (ng/mL/hr) Normal sodium diet
		Cord blood	4.0-32.0	Not Available
		Newborn (1-7 days)	2.0-35.0	Not Available
		1-12 months	2.4-37.0	Not Available
		13 months-3 years	1.7-11.2	Not Available
		4-5 years	1.0-6.5	Less than or equal to 15
		6-10 years	0.5-5.9	Less than or equal to 17
		11-15 years	0.5-3.3	Less than or equal to 16
		Adult	0.2-1.6	0.5-4.0